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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,330	09/25/2003	Chris D. Shelton	DYOUP0256US	5689

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EXAMINER

OLSON, LARS A

ART UNIT	PAPER NUMBER
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3617

DATE MAILED: 11/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/671,330

Applicant(s)

SHELTON, CHRIS D.

Examiner

Lars A Olson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25-27 is/are allowed.
- 6) ☒ Claim(s) 1-7 and 10-18 is/are rejected.
- 7) ☒ Claim(s) 8, 9, 19-24, 28 and 29 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).
2. Misnumbered claims 26 and 27 have been renumbered as claims 28 and 29.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-7 and 10-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patterson et al. (US 5,995,882) in view of Joao (US 5,917,405).

Patterson et al. discloses a remote operated vehicle (ROV) system, as shown in Figures 1-9, that is comprised of a topside in the form of a ship, as described in lines 29-45 of column 1, and a fish or ROV, defined as Part #30, with a GPS or position data receiver, defined as Part #54, that is mounted on an upwardly protruding portion or antenna tower, defined as Part #51, an onboard power supply, defined as Part #53, in

the form of a battery, a movement control device, defined as Part #73, that is operable to process position data and control movement of said ROV, as shown in Figure 5, and an optional umbilical cable, as described in lines 6-15 of column 4, for interconnecting said ROV and said topside in order to provide a communication path between said ROV and said topside.

Patterson et al., as set forth above, discloses all of the features claimed except for the use of an ROV with a position data transmitter for transmitting GPS position data, and a second position data receiver for receiving position data from a topside, as well as a topside with a GPS or position data receiver, a position data transmitter, and a second position data transmitter for sending position data to an ROV.

Joao discloses a control apparatus for vehicles, as shown in Figures 1-16, said apparatus being suitable for use with submersibles and marine vessels, as described in lines 24-40 of column 18, said apparatus being comprised of a remote system at an external location that includes a vehicle position and locating system receiver, defined as Part #14, with a position data transmitter, defined as Part #36, and a position data receiver, defined as Part #30, as shown in Figure 2, that is capable of receiving GPS information, in combination with a remote vehicle with a vehicle position and locating system, defined as Part #13, having a GPS or position data receiver, defined as Part #23, a position data transmitter, defined as Part #24, as shown in Figure 3, and a second position data receiver, defined as Part #3, that is capable of receiving GPS information from a second position data transmitter, defined as Part #2, that is disposed on said remote system, as shown in Figure 1.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to utilize a submersible with a GPS or position data receiver, a position data transmitter, and a second position data receiver for receiving GPS information from a remote location, and a marine vessel with a GPS or position data receiver, a position data transmitter, and a second position data transmitter for sending GPS information to said submersible, as taught by Joao, in combination with the ROV system as disclosed by Patterson et al. for the purpose of providing an ROV system with an ROV that is capable of receiving GPS information from both a satellite and a ship, as well as a ship that is capable of receiving GPS information from both a satellite and said ROV, and sending GPS information to said ROV, in order to improve the accuracy of positioning and controlling said ROV.

Allowable Subject Matter

5. Claims 25-27 are allowed.
6. Claims 8, 9 and 19-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hillenbrand et al. (US 5,749,312) discloses a system for deploying weapons carried in an unmanned undersea vehicle (UUV). Knudsen et al.

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discloses a method and device for tracking an underwater object utilizing an underwater search vehicle that is deployed and controlled from a marine vessel.

8. Any inquiry concerning this communication from the examiner should be directed to Exr. Lars Olson whose telephone number is (703) 308-9807.

lo

November 2, 2004

LARS A. OLSON
PATENT EXAMINER

Lars Olson

11/2/04